

AMENDMENT

In the Claims:

1. (currently amended) A flow sensor tube assembly, comprising:
a base member having first and second generally opposing sides;
an opening extending through the base member, the opening having first and second segments defining first and second diameters, respectively, the first diameter being greater than the second diameter;
a flow sensor tube having an end received in the opening;
a filler material situated in the first segment of the opening surrounding the flow sensor tube adjacent the first side of the base member; and
the flow sensor tube being welded to the base member adjacent the second side of the base member.
2. (canceled)
3. (currently amended) The flow sensor tube assembly of ~~claim 2~~ claim 1, wherein the filler material is situated in the first segment of the opening surrounding the flow sensor tube.
4. (original) The flow sensor tube assembly of claim 1, further comprising a nipple defined by the second side of the base member.

5. (original) The flow sensor tube assembly of ~~claim 2~~ claim 1, further comprising a nipple defined by the second side of the base member, wherein the second segment of the opening is situated at least partially in the nipple.

6. (original) The flow sensor tube assembly of claim 1, wherein the second side of the base member adjacent the opening is formed around the flow sensor tube so as to eliminate a gap between the opening and the flow sensor tube.

7. (original) The flow sensor tube assembly of claim 4, wherein the nipple is formed around the flow sensor tube so as to eliminate a gap between the opening and the flow sensor tube.

8. (original) The flow sensor tube assembly of claim 1, wherein a portion of the flow sensor tube extends from second side of the base member.

9. (original) The flow sensor tube assembly of claim 1, further comprising:
a second opening extending through the base member;
a second end of the flow sensor tube being received in the second opening;
a filler material situated in the second opening surrounding the flow sensor tube adjacent the first side of the base member; and
the second end of the flow sensor tube being welded to the base member adjacent the second side of the base member.

10. (original) The flow sensor tube assembly of claim 1, further comprising a groove defined in the first side of the base member surrounding the opening creating a raised boss adjacent the opening.

11. (original) The flow sensor tube assembly of claim 1, wherein the filler material comprises a braze material.

12. (original) The flow sensor tube assembly of claim 1, wherein the filler material comprises solder.

13. (original) The flow sensor tube assembly of claim 1, wherein the filler material comprises an epoxy.

14. (currently amended) A method of attaching a tube to a base member, comprising: inserting an end of the tube into an opening extending through the base member, the opening having first and second segments defining first and second diameters, respectively, the first diameter being greater than the second diameter;

situating a filler material around the tube in the first segment of the opening adjacent a first side of the base member; and

welding the tube to the base member adjacent a second side of the base member.

15. (canceled)

16. (original) The method of claim 14, further comprising swaging the second side of the base member to the tube.

17. (original) The method of claim 16, wherein swaging the second side of the base member includes swaging a nipple extending from the second side of the base member to the tube.

18. (original) The method of claim 14, wherein the tube is inserted into the opening such that a portion of the tube extends from second side of the base member.

19. (original) The method of claim 14, further comprising:
inserting a second end of the tube into a second opening extending through the base member;
situating a filler material around the second end of the tube in the second opening adjacent the first side of the base member; and
welding the second end of the tube to the base member adjacent the second side of the base member.

20. (original) The method of claim 14, wherein the filler material comprises a braze material, the method further comprising inductively heating the braze material situated in the opening.

21. (original) A flow sensor tube assembly, comprising:

a base member having first and second generally opposing sides;

an opening extending through the base member, the opening having first and second segments defining first and second diameters, respectively, the first diameter being greater than the second diameter;

a flow sensor tube having an end received in the opening;

first means for attaching the flow sensor tube to the base member adjacent the first side of the base member; and

second means for attaching the flow sensor tube to the base member adjacent the second side of the base member.

22. (new) A method of attaching a tube to a base member, comprising:

inserting an end of the tube into an opening extending through the base member, the opening having first and second segments defining first and second diameters, respectively, the first diameter being greater than the second diameter;

situating a filler material around the tube in the first segment of the opening adjacent a first side of the base member;

swaging a second side of the base member to the tube; and

welding the tube to the base member adjacent the second side of the base member.

23. (new) The method of claim 22, wherein swaging the second side of the base member includes swaging a nipple extending from the second side of the base member to the tube.

24. (new) A flow sensor tube assembly, comprising:

a base member having first and second generally opposing sides;

an opening extending through the base member;

a flow sensor tube having an end received in the opening;

a braze material situated in the opening surrounding the flow sensor tube adjacent the first side of the base member; and

the flow sensor tube being welded to the base member adjacent the second side of the base member.

25. (new) A flow sensor tube assembly, comprising:

a base member having first and second generally opposing sides;

an opening extending through the base member;

a flow sensor tube having an end received in the opening;

solder situated in the opening surrounding the flow sensor tube adjacent the first side of the base member; and

the flow sensor tube being welded to the base member adjacent the second side of the base member.

26. (new) A flow sensor tube assembly, comprising:

a base member having first and second generally opposing sides;

an opening extending through the base member;

a flow sensor tube having an end received in the opening;

epoxy situated in the opening surrounding the flow sensor tube adjacent the first side of the base member; and

the flow sensor tube being welded to the base member adjacent the second side of the base member.

27. (new) A method of attaching a tube to a base member, comprising:

inserting an end of the tube into an opening extending through the base member; brazing the tube to the base member adjacent a first side of the base member; and welding the tube to the base member adjacent a second side of the base member.

28. (new) A method of attaching a tube to a base member, comprising:

inserting an end of the tube into an opening extending through the base member; soldering the tube to the base member adjacent a first side of the base member; and welding the tube to the base member adjacent a second side of the base member.

29. (new) A method of attaching a tube to a base member, comprising:

inserting an end of the tube into an opening extending through the base member; situating epoxy around the tube in the opening adjacent a first side of the base member; and welding the tube to the base member adjacent a second side of the base member.